

# Optimizing Stabilization and Team Coordination for Type III/IV LTE Cleft

Ryan Skeens, MD

Monroe Carell Jr. Children's Hospital at Vanderbilt

Assistant Professor, Pediatrics; Division of Neonatology

Associate Medical Director, Complex Surgical Services



## Prenatal diagnosis of laryngotracheoesophageal clefts

M Samuel <sup>1</sup>, D M Burge, D M Griffiths

Affiliations + expand

PMID: 9430204 DOI: [10.1159/000264481](https://doi.org/10.1159/000264481)

# Baby KB

- Seen at 30.6 weeks, c/f EA +/- TEF, noted to have abnormal L lung and midline shift
- MFM US:
  - Normally grown, heart is displaced to midline chest, lungs appear more echogenic, absent stomach, AFI 40.3, normal BPP, normal dopplers

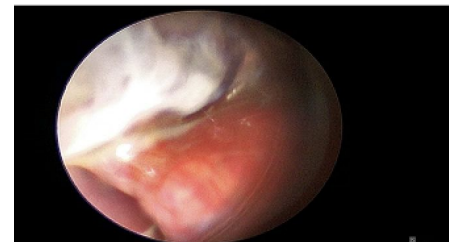
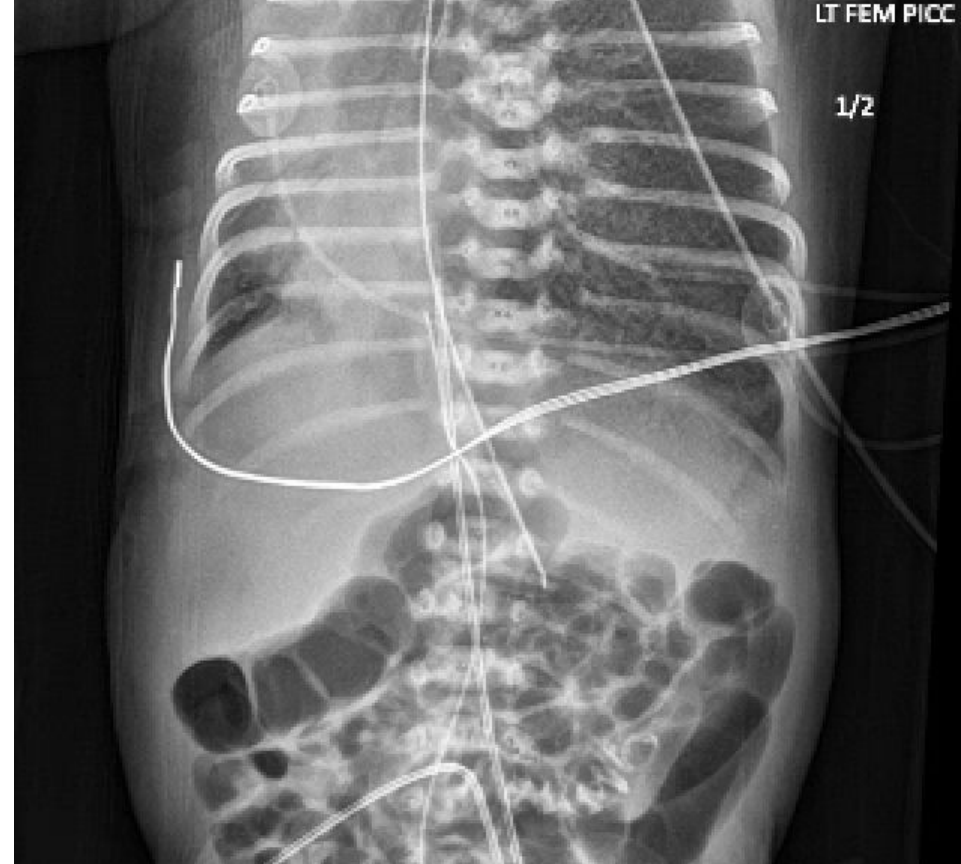
Triad: Lung anomaly, absent stomach, polyhydramnios

# Delivery

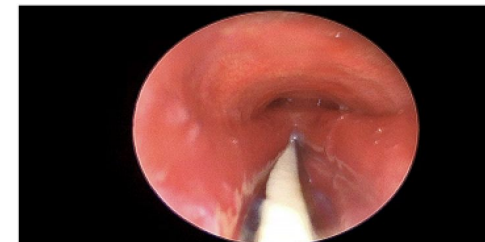
- 33 weeks, 0 days, 2.05 kg, precipitous delivery at home
- Transferred to community hospital ~1 hour from MCJCHV
- Intubated (3 attempts by NNP –kept “self-extubating” and going into the esophagus)
- Transferred to MCJCHV emergently, “self-extubated” on arrival

# Initial stabilization & diagnosis – Struggles & Strategies

- Difficult to oxygenate and ventilate, multiple ventilatory strategies, including CMV, HJFV, serial placement ETT
- Series of imaging
- Pediatric surgery - bronchoscopy
- Pediatric ENT - laryngoscopy



Ch1\_001\_S.JPG



Ch1\_002\_S.JPG



Neonatology

Pediatric  
general  
surgery

Pediatric ENT

Pediatric  
cardiothoracic  
surgery

Genetics

Palliative  
Care

Neurology

Oncology

ECMO

ID

Pediatric  
Transport  
Team

Pediatric  
Cardiac  
Anesthesia

Pediatric  
Radiology

# Role of ECMO

## Advantages

- Stabilization of the airway and hemodynamics

## Disadvantages

- ECMO complications
- Procedural bleeding risk, hemostasis
- Forced earlier repair
- Delayed wound earlier
- Infections